

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,962	12/03/2004	Gilles Cannet	Serie 5742	8577
Air Liquide	7590 09/27/2007		EXAM	INER
Intellectual Property Department Suite 1800 2700 Post Oak Boulevard Houston, TX 77056			RIVELL, JOHN A	
			ART UNIT	PAPER NUMBER
			3753	
· ·				
			MAIL DATE	DELIVERY MODE
			09/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/516,962	CANNET ET AL.				
Office Action Summary	Examiner	Art Unit				
	John Rivell	3753				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the (	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period was period to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be ti- vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. mely filed  n the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 8/22/	07 (amendment).					
a)⊠ This action is <b>FINAL</b> . 2b)□ This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4	55 O.G. 215.				
Disposition of Claims						
4) Claim(s) 11-24 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) 11-24 is/are rejected.						
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or	r election requirement.					
O/LI Cidim(o) dro dabjoot to routionom analor dissilon roquirom.						
Application Papers	•					
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) acce						
Applicant may not request that any objection to the objection Replacement drawing sheet(s) including the correct						
11) The oath or declaration is objected to by the Ex						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a	n)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)  1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	· (PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	oate				
Information Disclosure Statement(s) (PTO/SB/08)     Paper No(s)/Mail Date	5)  Notice of Informal I	гаtенt Арріісаціоп				

Art Unit: 3753

Applicant's arguments with respect to claims 11-24 have been considered but are most in view of the new ground(s) of rejection.

Claims 1-10 have been canceled. Claims 11-24 remain pending.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 11-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watkins (U. S. Pat. No. 2,271,785) in view of lung (U. S. Pat. No. 3,693,652), further in view of Arzenton et al. (U. S. Pat. No. 5,975,121 of record).

The patent to Watkins discloses, in figures 1-3 for example, an "apparatus which may be used for controlling the dispensing of a pressurized fluid, wherein: a) said apparatus comprises: 1) a body (at valve body 6) located about a first (longitudinal) axis comprising an internal passage (8) for said fluid, wherein said passage (8) extends between an inlet orifice (within the lower body extension below threads 18) and an outlet orifice (54); 2) a fastening base (the lower body extension) located about said first axis, wherein: (a) said base is threaded (at threads 18) at its external periphery; and (b) said base is substantially in coaxial connection with said inlet orifice; 3) an outlet connector (the external threaded outlet connecter at 54 of figure 1) located about a

Art Unit: 3753

second axis, wherein said outlet connector (at 54 of fig. 1) is substantially in connection with said outlet orifice;... 5) a tightening grip (at 14) comprising a tightening grip base (14)... and 6) a lever (50) having first (read on the area including the pivot cam at 52 to the connection of handle extension 50) and second (handle extension 50) legs and being located about a fourth axis, wherein (a) said lever (50) pivots around a fifth axis (at that axis of pin 48 supporting lever 50) which is substantially perpendicular to said first (longitudinal) axis; (b) said lever (50) cooperates with at least one valve means (at 24), located on said internal passage, so as to regulate fluid movement between said inlet orifice and said outlet orifice; and a first end (at the pivot point about the pivot axis of pin 48) of said first leg being adjacent to said fifth axis (i.e. that axis of pin 48 supporting lever 50), a second (opposite of the pivot end) end of said first leg being connected to a first end of said second leg (at handle extension 50)" as recited in claim 11.

Thus the patent to Watkins discloses all the claimed features with the exception of having "a second end of said second leg being disposed at a point along the first (longitudinal) axis between said second and third axes, said first and second legs being angled away from another at a juncture of said first leg second end and said second leg first end" and a manometer means located about a third axis, (comprising) a pressure take-off substantially connected to said internal passage (positioned such that) said tightening grip is substantially located between said manometer and said fastening base" and the specifically recited dimension requirements of "the distance between said tightening grip base and said third axis of said manometer is between about 27 mm and about 35 mm; the distance between said tightening grip base and said second axis of said outlet connector is between about 60 mm and about 75 mm; and the distance

Art Unit: 3753

between said base of said tightening grip base and said fifth axis of said lever is between about 50 mm and about 110 mm."

Firstly, the patent to lung discloses that it is known in the art to employ a pressure indicating gauge at 5, "located about a third axis" and fluidly communicated by a channel 56 to the valve body fluid passage in chamber 57, upstream of the control valve at 37 and thus indicating the pressure of the tank to which the valve is connected at al times, the gauge 5 being physically located above a wrench base at numeral 1 such that the "tightening grip (at 1) is substantially located between said manometer (5) and (a) fastening base" at externally threaded extension 7 which is in turn threadedly connected to the liquefied gas tank, for the purpose of providing an indication of the fluid pressure of the contents of the tank at all times and for the gauge to be located above the "grip" area of the valve so as to not interfere with installation of the valve body to the tank.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Watkins a pressure indicating gauge, "located about a third axis" and fluidly communicated by a channel to the valve body fluid passage 8, upstream of the control valve 24 and thus indicating the pressure of the tank to which the valve is connected at all times, the gauge being physically located above the wrench base 14 such that the "tightening grip (at 14) is substantially located between said manometer (5) and (a) fastening base" at externally threaded extension 18 which is in turn threadedly connected to the liquefied gas tank for the purpose of providing an indication of the fluid pressure of the contents of the tank at all times and for the gauge to be located above the "grip" area of the valve so as to not interfere with installation of the valve body to the tank as recognized by lung.

Art Unit: 3753

Secondly, to employ specific dimensional lengths such that "the distance between said tightening grip base (at 14 in Watkins) and said third axis (the gauge axis) of said manometer (as taught by lung) is between about 27 mm and about 35 mm; the distance between said tightening grip base (14) and said second axis of said outlet connector is between about 60 mm and about 75 mm; and the distance between said base of said tightening grip base (114) and said fifth axis of said lever is between about 50 mm and about 110 mm", would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). Clearly, the device of Watkins, as modified by lung, has dimensions between the specific elements recited. To employ a specific dimension, here length in millimeters, is not considered to be patentably distinguishing structure since the differences merely reflect a change in the specific length dimension between the recited elements producing a specific desired size of valve.

Lastly, the patent to Arzenton et al. discloses that it is known in the art to employ a valve operating handle at 5 (see figures 1 and 5), essentially being a "lever having first (read at the portion between the cam at the pivot pin 36 extending to the connection of the lower extending longitudinal portion) and second (the longitudinally extending portion) legs and being located about a fourth axis, wherein (a) said lever pivots around a fifth axis (e.g. the handle pivot axis at pin 36) which is substantially perpendicular to (a longitudinal) first axis; (b) said lever (5) cooperates with at least one valve means (at 13), located on (an) internal passage, so as to regulate fluid movement between (an) inlet orifice and (an) outlet orifice; and a first end (located at the pivot end) of said first leg being adjacent to said fifth axis (i.e. the pivot pin 36 axis), a second end of said first leg being connected to a first (upper) end of said second leg (i.e. the longitudinally

Art Unit: 3753

extending portion of handle 5), a second end of said second leg being disposed at a point along the first (longitudinal) axis between (a) second (at the outlet) and third (at the manometer 7 and/or 8) axes, said first and second legs being angled away from another at a juncture of said first leg second end and said second leg first end" for the purpose of providing a compact valve profile without having the valve handle normally extending away from the valve body thus potentially incurring unauthorized actuation caused by inadvertent contact with an otherwise extending handle such as the laterally extending handle of Watkins.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Watkins, as modified by lung, a valve handle whose "second leg, attached to the "first leg" is disposed along the first longitudinal axis of the valve body such that "said first and second legs (are) angled away from another at a juncture of said first leg second end and said second leg first end" for the purpose of providing a compact valve profile without having the valve handle normally extending away from the valve body thus potentially incurring unauthorized actuation caused by inadvertent contact with an otherwise extending handle such as the laterally extending handle of Watkins as recognized by Arzenton et al.

Regarding claim 12, in Watkins, lung and Arzenton et al., "said pressurized fluid comprises a gas" as recited.

Regarding claim 13, in Watkins, as modified by lung and Arzenton et al., to employ a "distance between said tightening grip base (at 14 of Watkins) and the top of said body (at the top of the cam of lever 50 of) between about 80 mm and 120 mm" would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). Clearly, the device of Watkins, as modified by lung and

Art Unit: 3753

Arzenton et al., has a total valve length between the specific elements recited. To employ a specific dimension, here length in millimeters, is not considered to be patentably distinguishing structure since the differences merely reflect a change in the specific length dimension between the recited elements producing a specific desired size of valve.

Regarding claim 14, in Watkins, as modified by lung and Arzenton et al., to employ a "distance between said tightening grip base (at 14 of Watkins) and said third axis (e.g. the axis of the gauge of) about 30 mm; b) (a) distance between said tightening grip base (14) and said second axis (at the axis of the outlet 54 of) about 65 mm; c) (a) distance between said tightening grip base (14) and said fifth axis (e.g. the axis about which the lever 50 pivots of) about 95 mm; and d) (a) distance between said tightening grip base (14) and said top of said body (at the top of the lever cam at 52 of) about 105 mm" would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). Clearly, the device of Watkins, as modified by lung, has dimensions between the specific elements recited. To employ a specific dimension, here length in millimeters, is not considered to be patentably distinguishing structure since the differences merely reflect a change in the specific length dimension between the recited elements producing a specific desired size of valve.

Regarding claim 15, in Watkins, "said first (longitudinal) axis and said second axis (at the threaded outlet connection at 54 of fig. 1) are substantially perpendicular" as recited.

Regarding claims 16 and 17, in Watkins as modified by lung and Arzenton et al., to employ a specific angle between planes at the longitudinal axis of the valve and the axis of the manometer and the axis of the lever such that "the angle between the plane

Art Unit: 3753

created by said first axis (the longitudinal axis) and said third axis (of the gauge), and the plane created by said first axis (the longitudinal axis) and said fourth axis (the axis about which the lever 50 is located of) between about 75° and about 105°" and "wherein said angle is about 90°" (claim 17) would have been an obvious thing to do in the device of the combination since doing so merely rearranges parts so that the face of the pressure gauge faces in a desired direction relative to the direction of the lever.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to physically relocate the various parts of the device of Watkins as modified by lung and Arzenton et al., so that the face of the pressure gauge faces in a desired direction relative to the lever, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claims 18 and 19, in Watkins, as modified by lung and Arzenton et al., to employ a specific angle between planes at the longitudinal axis of the valve and the axis of the manometer and the axis of the outlet such that "the angle between the plane created by said first (longitudinal) axis and said third axis (of the pressure gauge); and the plane created by said first (longitudinal) axis and said second axis (at the outlet 54 of fig. 1 of) less than about 45°" and "wherein said angle is about 30°" (claim 19) would have been an obvious thing to do in the device of the combination since doing so merely rearranges parts so that the face of the pressure gauge faces in a desired direction relative to the direction of the outlet passage.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to physically relocate the various parts of the device of Watkins as modified by lung and Arzenton et al., so that the face of the pressure gauge faces in a desired direction relative to the outlet passage, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Art Unit: 3753

Regarding claim 20, in Watkins, "said cooperation between said lever (50) and said valve means (24) comprises a movable rod (hollow rod 36) acting on said valve means (24)" as recited.

Regarding claim 21, in Watkins, "said lever (50) pivots between: a) at least one resting position (shown in figures 1 and 2) wherein said valve means (24) prevents an exiting of said fluid through said (outlet) connector (at 54 of fig. 1); and b) an active position (fig. 3) wherein said valve means (24) allows said fluid to circulate through said internal passage (8) and exit through said connector (at 54 of fig. 1)" as recited.

Regarding claim 22 in Watkins, "said valve means (24) is normally maintained in a closed position (fig. 2), when said lever is in said resting position, by a spring means (28)" as recited.

Regarding claim 23, Watkins discloses in figures 1-3 for example, an "apparatus which may be used for controlling the dispensing of a pressurized fluid, wherein: a) said apparatus comprises: 1) a body (at valve body 6) located about a first (longitudinal) axis comprising an internal passage (8) for said fluid, wherein said passage (8) extends between an inlet orifice (within the lower body extension below threads 18) and an outlet orifice (54); 2) a fastening base (the lower body extension) located about said first axis, wherein: (a) said base is threaded (at threads 18) at its external periphery; and (b) said base is substantially in coaxial connection with said inlet orifice; 3) an outlet connector (the external threaded outlet connecter at 54 of figure 1) located about a second axis, wherein said outlet connector (at 54 of fig. 1) is substantially in connection with said outlet orifice and wherein said first (longitudinal) axis and said second axis (the axis of the outlet connector at 54 of fig. 1) are substantially perpendicular;... 5) a tightening grip (at 14) comprising a tightening grip base (14)... 6) a lever (50) having first (read on the area including the pivot cam at 52 to the connection of handle

Art Unit: 3753

extension 50) and second (handle extension 50) legs and being located about a fourth axis, wherein (a) said lever (50) pivots around a fifth axis (at that axis of pin 48 supporting lever 50) which is substantially perpendicular to said first (longitudinal) axis and wherein said lever (50) also pivots between: (1) at least one resting position (shown in figures 1 and 2) wherein at least one valve means (24) prevents an exiting of said fluid through said (outlet) connector (at 54 of fig. 1); and (2) an active position (fig. 3) wherein said at least one valve means (24) allows said fluid to circulate through said internal passage (8) and exit through said connector (at 54 of fig. 1); and (b) said lever (50) cooperates with said at least one valve means (at 24), located on said internal passage, so as to regulate fluid movement between said inlet orifice and said outlet orifice, wherein said cooperation between said lever (50) and said valve means (24) comprises a movable rod (hollow rod 36) acting on said valve means (24); and a first end (at the pivot point about the pivot axis of pin 48) of said first leg being adjacent to said fifth axis (i.e. that axis of pin 48 supporting lever 50), a second (opposite of the pivot end) end of said first leg being connected to a first end of said second leg (at handle extension 50)" as recited in claim 23.

Thus the patent to Watkins discloses all the claimed features with the exception of having "a second end of said second leg being disposed at a point along the first (longitudinal) axis between said second and third axes, said first and second legs being angled away from another at a juncture of said first leg second end and said second leg first end" and a "manometer means located about a third axis, (comprising) a pressure take-off substantially connected to said internal passage (positioned such that) said tightening grip is substantially located between said manometer and said fastening base" and the specifically recited dimension requirements of "the distance between said tightening grip base and said third axis of said manometer is about 30 (mm); c) the

Art Unit: 3753

distance between said tightening grip base and said second axis of said outlet connector is about 65 mm; d) the distance between said base of said tightening grip base and said fifth axis of said lever is about 95 mm; e) the distance between said tightening grip base and the top of said body is between about 80 mm and 120 mm; f) the angle between the plane created by said first axis and said third axis, and the plane created by said first axis and said third axis, and about 105°; and g) the angle between the plane created by said first axis and said third axis; and the plane created by said first axis and said third axis; and the plane created by said first axis and said third axis; and the

Firstly, the patent to lung discloses that it is known in the art to employ a pressure indicating gauge at 5, "located about a third axis" and fluidly communicated by a channel 56 to the valve body fluid passage in chamber 57, upstream of the control valve at 37 and thus indicating the pressure of the tank to which the valve is connected at al times, the gauge 5 being physically located above a wrench base at numeral 1 such that the "tightening grip (at 1) is substantially located between said manometer (5) and (a) fastening base" at externally threaded extension 7 which is in turn threadedly connected to the liquefied gas tank, for the purpose of providing an indication of the fluid pressure of the contents of the tank at all times and for the gauge to be located above the "grip" area of the valve so as to not interfere with installation of the valve body to the tank.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Watkins a pressure indicating gauge, "located about a third axis" and fluidly communicated by a channel to the valve body fluid passage 8, upstream of the control valve 24 and thus indicating the pressure of the tank to which the valve is connected at all times, the gauge being physically located above the wrench base 14 such that the "tightening grip (at 14) is substantially located

Art Unit: 3753

between said manometer (5) and (a) fastening base" at externally threaded extension 18 which is in turn threadedly connected to the liquefied gas tank for the purpose of providing an indication of the fluid pressure of the contents of the tank at all times and for the gauge to be located above the "grip" area of the valve so as to not interfere with installation of the valve body to the tank as recognized by lung.

Secondly, to employ specific dimensional lengths such that "the distance between said tightening grip base (14 of Watkins) and said third axis (gauge axis) of said manometer is about 30 (mm); c) the distance between said tightening grip base (14) and said second axis of said outlet connector (at 54 of fig. 1) is about 65 mm; d) the distance between said base of said tightening grip base (14) and said fifth axis of said lever (50) is about 95 mm; e) the distance between said tightening grip base (14) and the top of said body (at the top of the lever cam 52) is between about 80 mm and 120 mm" would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). Clearly, the device of Watkins, as modified by lung, has dimensions between the specific elements recited. To employ a specific dimension, here length in millimeters, is not considered to be patentably distinguishing structure since the differences merely reflect a change in the specific length dimension between the recited elements producing a specific desired size of valve.

Thirdly, to employ a specific angle between planes at the longitudinal axis of the valve and the axis of the manometer and the axis of the lever such that "the angle between the plane created by said first axis (the longitudinal axis) and said third axis (of the gauge), and the plane created by said first axis (the longitudinal axis) and said fourth axis (the axis about which the lever 50 is located of) between about 75° and about 105°" and such that the "the angle between the plane created by said first

Art Unit: 3753

(longitudinal) axis and said third axis (of the pressure gauge); and the plane created by said first (longitudinal) axis and said second axis (at the outlet 54 of fig. 1 of) less than about 45°" would have been an obvious thing to do in the device of the combination since doing so merely rearranges parts so that the face of the pressure gauge faces in a desired direction relative to the direction of the lever and to the direction of the outlet passage. It would have been obvious to one having ordinary skill in the art at the time the invention was made to physically relocate the various parts of the device of Watkins as modified by lung, so that the face of the pressure gauge faces in a desired direction relative to the lever and relative to the outlet passage, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Lastly, the patent to Arzenton et al. discloses that it is known in the art to employ a valve operating handle at 5 (see figures 1 and 5), essentially being a "lever having first (read at the portion between the cam at the pivot pin 36 extending to the connection of the lower extending longitudinal portion) and second (the longitudinally extending portion) legs and being located about a fourth axis, wherein (a) said lever pivots around a fifth axis (e.g. the handle pivot axis at pin 36) which is substantially perpendicular to (a longitudinal) first axis; (b) said lever (5) cooperates with at least one valve means (at 13), located on (an) internal passage, so as to regulate fluid movement between (an) inlet orifice and (an) outlet orifice; and a first end (located at the pivot end) of said first leg being adjacent to said fifth axis (i.e. the pivot pin 36 axis), a second end of said first leg being connected to a first (upper) end of said second leg (i.e. the longitudinally extending portion of handle 5), a second end of said second leg being disposed at a point along the first (longitudinal) axis between (a) second (at the outlet) and third (at the manometer 7 and/or 8) axes, said first and second legs being angled away from

Art Unit: 3753

another at a juncture of said first leg second end and said second leg first end" for the purpose of providing a compact valve profile without having the valve handle normally extending away from the valve body thus potentially incurring unauthorized actuation caused by inadvertent contact with an otherwise extending handle such as the laterally extending handle of Watkins.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Watkins, as modified by lung, a valve handle whose "second leg, attached to the "first leg" is disposed along the first longitudinal axis of the valve body such that "said first and second legs (are) angled away from another at a juncture of said first leg second end and said second leg first end" for the purpose of providing a compact valve profile without having the valve handle normally extending away from the valve body thus potentially incurring unauthorized actuation caused by inadvertent contact with an otherwise extending handle such as the laterally extending handle of Watkins as recognized by Arzenton et al.

Regarding claim 24, the device of Watkins, as modified by lung, Arzenton et al., and in view of the generally recognized change in size, as set forth above, discloses all the claimed features with the exception of having "a protective covering surrounding at least part of said (valve)... said (valve being) substantially covered with a protective covering".

The patent to Arzenton et al. further discloses that it is known in the art to employ a "protective covering (at C) surrounding at least part (as well as) substantially (covering)" the entirety of the valve and pressure gauge for the purpose of protecting the valve and gauge from abuse.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Watkins, as modified by lung and in view of a

Art Unit: 3753

change in size, a protective covering surrounding the valve body and gauge for the purpose of protecting the valve and gauge from abuse as recognized by Arzenton et al.

Claims 11-23 are further rejected under 35 U.S.C. 103(a) as being unpatentable over Lange et al. (FR 2 828 922).

The translation of the reference to Lange et al. (FR) found in Lang et al. (U. S. Patent Publication No. 2004/00231729) is relied on for accuracy.

The patent to Lang et al. (FR) discloses, in figures 2-4 for example, an "apparatus which may be used for controlling the dispensing of a pressurized fluid, wherein: a) said apparatus comprises: 1) a body (1) located about a first (longitudinal) axis comprising an internal passage (at 3, 31, 32) for said fluid, wherein said passage extends between an inlet orifice (31) and an outlet orifice (32); 2) a fastening base (at lower threaded connector 17 and the portion of body 1 immediately above 17) located about said first (longitudinal) axis, wherein: (a) said base is threaded at its external periphery (at 18); and (b) said base (17) is substantially in coaxial connection with said inlet orifice (31); 3) an outlet connector (19) located about a second axis, wherein said outlet connector (19) is substantially in connection with said outlet orifice (32); 4) a manometer means (pressure gauge 40) located about a third axis, wherein said manometer means (40) comprises a pressure take-off (41) substantially connected to said internal passage (3); 5) a tightening grip comprising a tightening grip base (the portion of body 1 immediately above 17), wherein said tightening grip is substantially located between said manometer (40) and said fastening base (17); and 6) a lever (2) having first (from the pivot at axis "XX" to the connection to the longitudinally extending portion of handle 2) leg and a second (the longitudinally extending portion of handle 2) legs and being located about a fourth axis, wherein (a) said lever (2) pivots around a fifth axis (marked "XX") which is substantially perpendicular to said first (longitudinal)

Art Unit: 3753

axis; and (b) said lever (2) cooperates with at least one valve means (4), located on said internal passage (3), so as to regulate fluid movement between said inlet orifice (31) and said outlet orifice (32); and a first end (at the pivot "XX") of said first leg being adjacent to said fifth axis ("XX"), a second (opposite) end of said first leg being connected to a first end of said second (longitudinally extending) leg, a second end of said second leg being disposed at a point along the first (longitudinal) axis between said second (at the outlet 32) and third (at the manometer 40) axes, said first and second legs being angled away from another at a juncture of said first leg second end and said second leg first end" as recited.

Thus the document to Lang et al. (FR) discloses all the claimed features with the exception of having the specifically recited dimension requirements of "the distance between said tightening grip base and said third axis of said manometer is between about 27 mm and about 35 mm; the distance between said tightening grip base and said second axis of said outlet connector is between about 60 mm and about 75 mm; and the distance between said base of said tightening grip base and said fifth axis of said lever is between about 50 mm and about 110 mm."

To employ specific dimensional lengths such that "the distance between said tightening grip base (at the portion of body 1 immediately above lower connector 17) and said third axis (the gauge 40 axis) of said manometer is between about 27 mm and about 35 mm; the distance between said tightening grip base and said second axis of said outlet connector (19) is between about 60 mm and about 75 mm; and the distance between said base of said tightening grip base and said fifth axis of said lever is between about 50 mm and about 110 mm", would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). Clearly, the device

**Art Unit: 3753** 

of Lang et al. (FR) has dimensions between the specific elements recited. To employ a specific dimension, here length in millimeters, is not considered to be patentably distinguishing structure since the differences merely reflect a change in the specific length dimension between the recited elements producing a specific desired size of valve.

Regarding claim 12, in Lang et al. (FR), "said pressurized fluid comprises a gas" as recited.

Regarding claim 13, in Lang et al. (FR), to employ a "distance between said tightening grip base (at the portion of body 1 immediately above lower connector 17) and the top of said body (at the top of the cam of lever 2 of) between about 80 mm and 120 mm" would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). Clearly, the device of Lang et al. (FR) has a total valve length between the specific elements recited. To employ a specific dimension, here length in millimeters, is not considered to be patentably distinguishing structure since the differences merely reflect a change in the specific length dimension between the recited elements producing a specific desired size of valve.

Regarding claim 14, in Lang et al. (FR), to employ a "distance between said tightening grip base (at the portion of body 1 immediately above lower connector 17) and said third axis (e.g. the axis of the gauge 40 of) about 30 mm; b) (a) distance between said tightening grip base and said second axis (at the axis of the outlet connector 19) about 65 mm; c) (a) distance between said tightening grip base and said fifth axis (e.g. the axis about which the lever 2 pivots of) about 95 mm; and d) (a) distance between said tightening grip base and said top of said body (at the top of the lever 2) about 105 mm" would have involved a mere change in the size of a component.

Art Unit: 3753

A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). Clearly, the device of Lang et al. (FR) has dimensions between the specific elements recited. To employ a specific dimension, here length in millimeters, is not considered to be patentably distinguishing structure since the differences merely reflect a change in the specific length dimension between the recited elements producing a specific desired size of valve.

Regarding claim 15, in Lang et al. (FR), "said first (longitudinal) axis and said second axis (at the threaded outlet connection 19) are substantially perpendicular" as recited.

Regarding claims 16 and 17, in Lang et al. (FR), to employ a specific angle between planes at the longitudinal axis of the valve and the axis of the manometer and the axis of the lever such that "the angle between the plane created by said first axis (the longitudinal axis) and said third axis (of the gauge 40), and the plane created by said first axis (the longitudinal axis) and said fourth axis (the axis about which the lever 2 is located of) between about 75° and about 105°" and "wherein said angle is about 90°" (claim 17) would have been an obvious thing to do in Lang et al. (FR) since doing so merely rearranges parts so that the face of the pressure gauge faces in a desired direction relative to the direction of the lever. It would have been obvious to one having ordinary skill in the art at the time the invention was made to physically relocate the various parts of the device Lang et al. (FR), so that the face of the pressure gauge 40 faces in a desired direction relative to the lever, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claims 18 and 19, in Lang et al. (FR), to employ a specific angle between planes at the longitudinal axis of the valve and the axis of the manometer and the axis of the outlet such that "the angle between the plane created by said first

Art Unit: 3753

(longitudinal) axis and said third axis (of the pressure gauge 40); and the plane created by said first (longitudinal) axis and said second axis (at the outlet 19 of) less than about 45°" and "wherein said angle is about 30°" (claim 19) would have been an obvious thing to do in Lang et al. (FR) since doing so merely rearranges parts so that the face of the pressure gauge faces in a desired direction relative to the direction of the outlet passage. It would have been obvious to one having ordinary skill in the art at the time the invention was made to physically relocate the various parts of the device of Lang et al. (FR) so that the face of the pressure gauge 40 faces in a desired direction relative to the outlet passage, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claim 20, in Lang et al. (FR), "said cooperation between said lever (2) and said valve means (4) comprises a movable rod (rod 5) acting on said valve means (4)" as recited.

Regarding claim 21, in Lang et al. (FR), "said lever (2) pivots between: a) at least one resting position wherein said valve means (4) prevents an exiting of said fluid through said (outlet) connector (19, at outlet 32); and b) an active position wherein said valve means (4) allows said fluid to circulate through said internal passage (3) and exit through said connector (19)" as recited.

Regarding claim 22 in Watkins, "said valve means (24) is normally maintained in a closed position (fig. 2), when said lever is in said resting position, by a spring means (28)" as recited.

Regarding claim 23, Lang et al. (FR) discloses an "apparatus which may be used for controlling the dispensing of a pressurized fluid, wherein: a) said apparatus comprises: 1) a body (1) located about a first (longitudinal) axis comprising an internal passage (3) for said fluid, wherein said passage (3) extends between an inlet orifice

Art Unit: 3753

(31) and an outlet orifice (32); 2) a fastening base (17) located about said first (longitudinal) axis, wherein: (a) said base (17) is threaded at its external periphery (at 18); and (b) said base (17) is substantially in coaxial connection with said inlet orifice (31); 3) an outlet connector (19) located about a second axis, wherein said outlet connector (19) is substantially in connection with said outlet orifice (32) and wherein said first (longitudinal) axis and said second axis (the outlet connector 19 axis) are substantially perpendicular; 4) a manometer means (pressure gauge 40) located about a third axis, wherein said manometer means (40) comprises a pressure take-off (41) substantially connected to said internal passage (3); 5) a tightening grip comprising a tightening grip base (the portion of body 1 immediately above 17), wherein said tightening grip is substantially located between said manometer (40) and said fastening base (17); and 6) a lever (2) having first (from the pivot at axis "XX" to the connection to the longitudinally extending portion of handle 2) leg and a second (the longitudinally extending portion of handle 2) legs and being located about a fourth axis, wherein (a) said lever (2) pivots around a fifth axis (at "XX") which is substantially perpendicular to said first (longitudinal) axis and wherein said lever (2) also pivots between: (1) at least one resting position wherein at least one valve means (4) prevents an exiting of said fluid through said connector; and (2) an active position wherein said at least one valve means (4) allows said fluid to circulate through said internal passage (3) and exit through said connector (19); and (b) said lever (2) cooperates with said at least one valve means (4), located on said internal passage (3), so as to regulate fluid movement between said inlet orifice (31) and said outlet orifice (32), wherein said cooperation between said lever (2) and said valve means (4) comprises a movable rod (5) acting on said valve means (4); and a first end (at the pivot "XX") of said first leg being adjacent to said fifth axis ("XX"), a second (opposite) end of said first leg being connected to a first

Application/Control Number: 10/516,962 Page 21

Art Unit: 3753

end of said second (longitudinally extending) leg, a second end of said second leg being disposed at a point along the first (longitudinal) axis between said second (at the outlet 32) and third (at the manometer 40) axes, said first and second legs being angled away from another at a juncture of said first leg second end and said second leg first end" as recited.

To employ a specific angle between planes at the longitudinal axis of the valve and the axis of the manometer and the axis of the lever such that "the angle between the plane created by said first axis (the longitudinal axis) and said third axis (of the gauge), and the plane created by said first axis (the longitudinal axis) and said fourth axis (the axis about which the lever 2 is located of) between about 75° and about 105°" and such that the "the angle between the plane created by said first (longitudinal) axis and said third axis (of the pressure gauge 40); and the plane created by said first (longitudinal) axis and said second axis (at the outlet connector 19 of) less than about 45°" would have been an obvious thing to do in the device of Lang et al. (FR) since doing so merely rearranges parts so that the face of the pressure gauge 40 faces in a desired direction relative to the direction of the lever 2 and to the direction of the outlet passage 32. It would have been obvious to one having ordinary skill in the art at the time the invention was made to physically relocate the various parts of the device of Lang et al. (FR) so that the face of the pressure gauge 40 faces in a desired direction relative to the lever 2 and relative to the outlet passage 32, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 **USPQ 70.** 

Claim 24 is are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang et al. (FR) as applied to claims 11-23 above, further in view of Arzenton et al.

Art Unit: 3753

The device of Lang et al. (FR) in view of the generally recognized change in size, discloses all the claimed features with the exception of having "a protective covering surrounding at least part of said (valve)... said (valve being) substantially covered with a protective covering".

The patent to Arzenton et al. discloses that it is known in the art to employ a "protective covering (at C) surrounding at least part (as well as) substantially (covering)" the entirety of the valve and pressure gauge for the purpose of protecting the valve and gauge from abuse.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Lang et al. (FR), as modified, a protective covering surrounding the valve body and gauge for the purpose of protecting the valve and gauge from abuse as recognized by Arzenton et al.

## Response to Arguments

Regarding applicants remarks as they may apply to the combination of Watkins, lung and Arzenton et al., above, the patent to Arzenton et al. clearly teaches the utilization of a valve actuating handle 5 including "first and second legs... (in which) a first end (at the pivot pin 36) of said first leg being adjacent to said fifth axis (at pivot pin 36), a second (opposite) end of said first leg being connected to a first end of said second (longitudinally extending) leg, a second end of said second leg being disposed at a point along the first (longitudinal) axis between said second (at the outlet) and third (at the manometer 7 and/or 8) axes, said first and second legs being angled away from another at a juncture of said first leg second end and said second leg first end" for the purpose of providing a compact valve profile without having the valve handle normally extending away from the valve body thus potentially incurring unauthorized actuation

Art Unit: 3753

caused by inadvertent contact with an otherwise extending handle such as the laterally extending handle of Watkins.

Regarding applicants remarks as they may apply to the French patent to Lange, clearly Lange discloses a valve actuating handle 2 including "a lever (2) having first (from the pivot at axis "XX" to the connection to the longitudinally extending portion of handle 2) leg and a second (the longitudinally extending portion of handle 2) legs and being located about a fourth axis, (and in which) said first leg (is) adjacent to said fifth axis ("XX"), a second (opposite) end of said first leg (is) connected to a first end of said second (longitudinally extending) leg, a second end of said second leg (is) disposed at a point along the first (longitudinal) axis between said second (at the outlet 32) and third (at the manometer 40) axes, said first and second legs (are) angled away from another at a juncture of said first leg second end and said second leg first end" as recited.

Concerning applicants regarding the application of court precedent against the claims, while the amended subject does not involve the recitation of specific dimensional requirements, the remaining portions of the claims do indeed recite specific dimensional requirements.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Art Unit: 3753

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Rivell whose telephone number is (571) 272-4918. The examiner can normally be reached on Mon.-Fri. from 6:30am-3:00pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Primary Examiner
Art Unit 3753